



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,383	07/19/2006	Detlef Busch	05581-00146-US	3871
23416 7590 02/20/2009 CONNOLLY BOVE LODGE & HUTZ, LLP P O BOX 2207 WILMINGTON, DE 19899				
EXAMINER VANATTA, AMY B				
ART UNIT		PAPER NUMBER		
3765				
MAIL DATE		DELIVERY MODE		
02/20/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/586,383

**Applicant(s)**

BUSCH ET AL.

**Examiner**

Amy B. Vanatta

**Art Unit**

3765

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/ISD)
- Paper No(s)/Mail Date 07192006

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are replete with indefinite language and appear to be a literal translation which does not conform to standard U.S. practice.

In claim 1, line 2, the recitation "which film is heated" is confusing in that it is unclear whether this heating step is being claimed as forming a step of the claimed method.

In claim 1, the following recitations lack proper antecedent basis: "the slowly operating part", "the drawing unit" (lines 2-3), "the rapidly operating part", "the pair" of rollers (line 5), and "the peripheral areas" (line 9).

In claim 2, the recitations of "the rollers" and "the two rollers" render the claim indefinite, since "at least one driven roller" is claimed, as well as "at least a second driven roller". Thus, the roller (i.e. the first roller) and the second roller may comprise a plurality of rollers, and therefore the subsequent recitations of rollers are indefinite since it is unclear exactly which rollers are being referred to. Similarly, in claim 14, it is unclear which rollers are being referred to in line 2.

In claim 3, the recitation of a "foil" periphery is indefinite in that the film was not previously recited as being a "foil".

In claim 3, line 4, the recitation of "several rolls" renders the claim indefinite since it is unclear exactly how many constitutes "several".

In claim 3, line 8, the recitation of "gripping/touching" renders the claim indefinite since it is whether both gripping and touching are being claimed.

Claim 4 further limits the rolls and carriage of claim 3, and thus it appears that claim 4 should depend upon claim 3 rather than claim 2. Also, "the row" of rolls lacks proper antecedent basis.

In claims 5-9, 12, and 16, the entire dependency phrase has been deleted in line 1, without inserting a new claim number. It appears that these claims would each depend at least from claim 3, however, as the structure from claim 3 is recited within these claims.

Also, claim 5 recites "the contact points" without proper antecedent basis.

Claim 8 recites "the fixing pressure" without proper antecedent basis.

In claim 12, the phrase "in each case" is confusing and renders the claim indefinite.

In claims 5, 14, 15, 16, and 19, the term "exhibit(s)" is indefinite, as it is unclear exactly what is structurally required to "exhibit" another claimed element or structure

Claim 13 recites "the slower roller" and "the more rapidly operating roller" without proper antecedent basis.

Claim 20 is confusing in that it recites a process for drawing by means of "a device according to claim 1", however claim 1 recites a method rather than a device. It appears that the device which is being used in the method of claim 20 is the device of claim 3, since the carriage(s) and rolls of claim 3 are further recited in claim 20. Claim 20 should be amended to more clearly recite the claimed method, including the structure of claim 3.

Claim 21 is confusing in reciting "a device according to." (line 2). Also, the claim is confusing in appearing to recite use of a device which may be different from the device (presumably that of claim 3) recited in claim 20.

In claims 23-25, the entire dependency phrase has been deleted in line 1, without inserting a new claim number. Thus it is unclear from what claims these claims depend.

In claims 22, 26, and 27, it is unclear in what manner the claims further limit the claimed method. That is, it is unclear whether the film referred to in claims 22, 26, and 27 is the film which is processed in the claim method.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Gunter, Jr. et al (5,355,564).

Gunter, Jr. et al disclose a process for longitudinally drawing a film of thermoplastic polymer, including heating the polymer in a "slowly operating part" of the drawing unit; see heating zone 24 positioned adjacent the slower moving rollers 12,14 (Fig. 1). See col. 4, lines 41-46, disclosing that rollers 16,18 have a higher speed than nip rollers 12,14, in order to perform longitudinal stretching of the film (20). The film is passed to a drawing zone between the "rapidly operating part" (16,18) of the unit and the slower rollers (12,14) as claimed. A drawing gap is formed between the rollers 12,14 and 16,18 and the film is passed into this drawing gap, as claimed. Grippers 30 grip the edge portions of the film 20 in order to prevent widthwise shrinkage (col. 4, lines 46-48). Thus, the film (20) is mechanically gripped by the fixing device (grippers 30) in the drawing gap and is fixed in such a way that the width of the film is not significantly changed during drawing, as in claim 1.

Gunter also discloses a device as in claim 2, including at least one driven roller (12,14) and at least a second driven roller (16,18), with the first rollers (12,14) being driven at a speed which is less than that of the second driven rollers (16,18) so as to form a drawing gap therebetween as claimed (col. 4, lines 41-46). A width maintaining device (30) is arranged between the rollers 12,14 and rollers 16,18. The width maintaining device mechanically grips both peripheral areas of the film (20) such that the width of the film remains essentially unchanged during longitudinal drawing in the drawing gap, as claimed (col. 4, lines 46-48).

5. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Andersen (3,807,004).

Andersen discloses a process for longitudinally drawing a film of thermoplastic polymer, including heating the polymer in a "slowly operating part" of the drawing unit; see heating elements 9 positioned adjacent the slower moving rollers 2,3. See col. 3, lines 17-21, disclosing that rollers 6,7 have a higher speed than feed rollers 2,3, in order to perform longitudinal stretching of the sheet. The film is passed to a drawing zone between the "rapidly operating part" (6,7) of the unit and the slower rollers 2,3, as claimed. A drawing gap is formed between the rollers 6,7 and 2,3, and the film is passed into this drawing gap as claimed. In the case that only longitudinal stretching is desired in the method and apparatus of Andersen, with no transverse stretching, Andersen discloses that disks 4 may be positioned parallel to one another (as shown in phantom in Fig. 1) and to the direction of movement of the sheet in order to grip the sheet while it is being stretched longitudinally, to prevent a neck formation across the width of the sheet (col. 3, lines 22-35 and col. 5, lines 19-22). The disks 4 and rubber rollers 5 grip the edges of the sheet (col. 6, lines 10-14 and Figs. 1-2). Thus, the film (sheet 1) is mechanically gripped by the fixing device (4,5) in the drawing gap and fixed in such a way that the width of the film is not significantly changed during drawing, as in claim 1.

Andersen also discloses a device as in claim 2, including at least one driven roller (2,3) and at least a second driven roller (6,7), with the first rollers 2,3 being driven at a speed which is less than that of the second driven rollers 6,7 so as to form a

drawing gap therebetween as claimed (col. 3, lines 17-21). A width maintaining device (4,5) is arranged between these two pairs of rollers (see 4,5 in Figs. 1 and 2, and specifically as shown in phantom in Fig. 1). The width maintaining device mechanically grips both peripheral areas of the film (1) such that the width of the film remains essentially unchanged during longitudinal drawing in the drawing gap, as claimed (see col. 3, lines 22-35 and col. 5, lines 19-22).

6. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Bruckner (3,201,826).

Bruckner discloses a process for longitudinally drawing a film of thermoplastic polymer, including heating the polymer in a "slowly operating part" of the drawing unit; see heating element 9 positioned adjacent the slower moving rollers 3,4,5. See col. 2, lines 52-54, disclosing that rollers 6,7,8 have a higher speed than feed rollers 3,4,5, in order to perform longitudinal stretching of the sheet (1). The film (sheet 1) is passed to a drawing zone between the "rapidly operating part" (6,7,8) of the unit and the slower rollers (3,4,5) as claimed. A drawing gap is formed between the rollers 6,7,8 and 3,4,5 and the film is passed into this drawing gap. Rollers 10 press the edge portions of the sheet 1 against roller 6, in order to prevent widthwise shrinkage (col. 2, lines 57-60). Alternatively see Figs. 4-5, in which rollers 10 and rollers 12 grip the edge portions (col. 3, lines 3-6). The film (sheet 1) is mechanically gripped by the fixing device (rollers 10,6 in Fig. 1 or rollers 10,12 in Figs. 4-5) in the drawing gap and fixed in such a way that the width of the film is not significantly changed during drawing, as in claim 1.



Bruckner also discloses a device as in claim 2, including at least one driven roller (3,4,5) and at least a second driven roller (6,7,8), with the first rollers (3,4,5) being driven at a speed which is less than that of the second driven rollers (6,7,8) so as to form a drawing gap therebetween as claimed (col. 2, lines 52-54). A width maintaining device is arranged between the rollers 3-5 and rollers 6-8 (see 10,6 in Fig. 1, or rollers 10,12 in Figs. 4-5). The width maintaining device mechanically grips both peripheral areas of the film (1) such that the width of the film remains essentially unchanged during longitudinal drawing in the drawing gap, as claimed (see col. 2, lines 57-60).

#### ***Allowable Subject Matter***

7. Claims 3-28 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Although the dependency of some of the above claims remains unclear since the dependency was deleted in the preliminary amendment, it appears that all of claims 4-28 depend at least from claim 3, which recites allowable subject matter.

#### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy B. Vanatta whose telephone number is 571-272-4995. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Welch can be reached on 571-272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Amy B Vanatta/  
Primary Examiner  
Art Unit 3765